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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/645,223	08/20/2003	John M. Jones	11283/09054	7132

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EXAMINER
MORROW, JASON S

ART UNIT	PAPER NUMBER
3612	

DATE MAILED: 09/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/645,223	JONES ET AL.	
	Examiner	Art Unit	
	Jason S. Morrow	3612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-109* is/are pending in the application.

4a) Of the above claim(s) *90-109* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3, 6-12, 15, 16, 18-23, 26-31, 34-42, 44, 46-48, 51-65, 67, 68, 71, 73-75, 78, 80-88* is/are rejected.

7)☒ Claim(s) *4,5,13,14,17,24,25,32,33,43,45,49,50,66,69,70,72,76,77,79 and 89* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *20 August 2003* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *11/03, 10/03, 5/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "110a" has been used to designate both the foundation layer and the fabric layer. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Election/Restrictions

2. Claims 90-109 withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 6/24/05.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Claim 12 recites the limitation "said fibers" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 3, 6-12, 15, 16, 18-23, and 26-31 are rejected under 35 U.S.C. 102(b) as being anticipated by Lynn et al.

Re claim 1, Lynn et al. discloses a thermal insulated composite wall panel for use in insulated trailers, containers and insulated compartments comprising a first substantially gas impermeable liner panel (11, 27, 28), a second substantially gas impermeable liner panel (30, 31, 32) having, at least one gas impermeable barrier layer (30), and at least one structural polymer resin layer (30) disposed coplanar to and bonded with said barrier layer, thereby forming a laminate liner panel, and an insulated core layer (13) intermediate said first and said second substantially gas impermeable liner panels.

Re claim 3, Lynn et al. discloses at least one gas impermeable barrier layer being a metallized polyester film (column 4, line 7).

Re claim 6, a first adhesive layer (15) is intermediate the at least one barrier layer and the at least one structural polymer resin.

Re claim 7, the at least one gas impermeable barrier layer is a metallized polypropylene film (see column 4, lines 1 and 2, polypropylene is a well known to be metallized and used as a barrier layer and is thus encompassed by the broad language).

Re claim 8, the at least one gas impermeable barrier layer is a metal foil (see column 4 lines 1 and 2).

Re claim 9, a scrim layer (31) is provided.

Re claim 10, a surface film layer (32) is provided.

Re claim 11, the scrim layer further comprises glass fibers (column 4, line 58).

Re claim 12, the fibers are polyester (column 4, line 59).

Re claim 15, a second structural polymer resin layer is provided (11).

Re claim 16, a second adhesive layer (15) is intermediate the at least one gas impermeable barrier layer and the second structural polymer resin layer.

Re claim 18, the first substantially gas impermeable liner panel is formed from aluminum (column 4, line 1).

Re claim 19, the first substantially gas impermeable liner panel is formed from the same laminate as said second substantially gas impermeable liner panel (see figure 4).

Re claim 20, Lynn et al. discloses a method for forming a thermal insulated composite wall panel for use in insulated trailers, containers and insulated compartments comprising providing a first substantially gas impermeable liner panel (11, 27, 28), providing a second substantially gas impermeable liner panel (30, 31, 32) having, at least one gas impermeable

barrier layer (30), and at least one structural polymer resin layer (32) disposed coplanar to and bonded with said barrier layer, thereby forming a laminate liner panel, inserting an insulated core material (13) between said first and said second substantially gas impermeable liner panels to form a thermal insulated composite wall panel.

Re claim 21, the method includes adhesively (by 15) bonding the first and second substantially gas impermeable liner panels to the insulated core material.

Re claim 22, the method includes spacing said first and said second substantially gas impermeable liner panels apart from each other to form a channel therebetween and inserting a thermoset core (13) into said channel.

Re claim 23, the thermoset core is a gas impregnated polyurethane foam (column 5, line 52).

Re claim 26, the at least one gas impermeable barrier layer is a metallized polyester film (column 4, line 7).

Re claim 27, a first adhesive layer is intermediate the at least one gas impermeable barrier layer and the at least on structural polymer resin layer (see figure 4).

Re claim 28, the at least one gas impermeable barrier layer is a metallized polypropylene film (see column 4, lines 1 and 2, polypropylene is a well known to be metallized and used as a barrier layer and is thus encompassed by the broad language).

Re claim 29, a second structural polymer resin layer (32) is provided.

Re claim 30, a second adhesive layer (15) is intermediate the at least one gas impermeable barrier layer and the second structural polymer resin layer.

Re claim 31, the first substantially gas impermeable liner panel is formed from the same bi-laminate as said second substantially gas impermeable liner panel (see figure 4).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lynn et al. in view of the Plastics Handbook.

Lynn et al. discloses all the limitations of the claim, as applied above, except for the structural polymer resin layer including polypropylene.

The Plastics Handbook teaches the use of polypropylene films being oriented.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to construct a structural polymer resin layer, such as that disclosed above, from polypropylene, as taught by the Plastics handbook, since Lynn et al. suggests using an oriented polymer layer (column 3, lines 42-45), but does not suggest exactly what layers can be used and polypropylene is a common polymer material.

10. Claims 34, 36-42, 44, 46, 48, 51-58, 60-65, 67, 68, 71, 80, and 82-88 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lynn et al. in view of MacAulay.

Lynn et al. discloses all the limitations of the claims, as applied above, except for the wall panel being used in combination with a cargo compartment pulled by a motorized vehicle having a floor supported by a wheeled chassis, a roof, and a first side wall extending vertically between the roof and a side edge of the floor, wherein at least one of the first side wall, the floor and the roof is formed from the thermal insulated wall panel.

MacAulay teaches the use of a thermal insulated wall panel in combination with a mobile home (see paragraph 0016), mobile homes typically including a floor supported by a wheeled chassis, a roof, a plurality of wheels, and a first sidewall extending vertically between the roof and a side edge of the floor.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a thermal insulated wall panel, such as that disclosed by Lynn et al., in combination with a thermal insulated wall panel in combination with a mobile home, mobile homes typically including a floor supported by a wheeled chassis, a roof, a plurality of wheels, and a first sidewall extending vertically between the roof and a side edge of the floor, as taught by MacAulay, in order to provide insulation to a motor home and reduce the homes heating and cooling needs.

11. Claims 35, 47, 59, 73, 74, 75, 78, and 81 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lynn et al. and MacAuluy et al. as applied to claims 34, 36, 38, 39, 41, 42, 46, 51, 53-58, 60, 62-65, 71, 80, 82, 84, and 85 above, and further in view of the Plastics Handbook.

Lynn et al. and MacAuluy et al. discloses all the limitations of the claims, as applied above, except for the structural polymer resin layer including polypropylene.

The Plastics Handbook teaches the use of polypropylene films being oriented.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to construct a structural polymer resin layer, such as that disclosed above, from polypropylene, as taught by the Plastics handbook, since Lynn et al. suggests using an oriented polymer layer (column 3, lines 42-45), but does not suggest exactly what layers can be used and polypropylene is a common polymer material.

Allowable Subject Matter

12. Claims 4, 5, 13, 14, 17, 24, 25, 32, 33, 43, 45, 49, 50, 66, 69, 70, 72, 76, 77, 79, and 89 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Fetz et al., Ehrlich, Kawanomoto et al., Ehrlich et al., and Kemp et al. disclose wall constructions.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason S. Morrow whose telephone number is (571) 272-6663. The examiner can normally be reached on Monday-Friday, 8:00a.m.-4:30p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Dayoan can be reached on (571) 272-6659. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jason S. Morrow
Primary Examiner
Art Unit 3612

September 3, 2005

JASON MORROW
PRIMARY PATENT EXAMINER
9/3/05